

BACHELOR OF PHYSIOTHERAPY (BPT)
SEMESTER -VIII EXAMINATION, SEPTEMBER- 2026

MANUAL THERAPY

[Time allotted: Three Hours]

[Max Marks: 100]

Note: Read all the instructions carefully

Answer all questions in serial order. Draw suitable diagrams wherever necessary

Q. 1. Objective type questions: (Attempt All)

(10 x 02 = 20)

(Very short/ short answer/ MCQ/ One liners/ Fill in the blanks/ True/False)

- a. Manual therapy is best defined as: [CO1 PO1,5,8,9]
 - i. Use of electrical modalities for pain relief
 - ii. Hands-on technique applied to joints and soft tissue for assessment and treatment
 - iii. Group-based exercise therapy
 - iv. Use of pharmacological agents for musculoskeletal pain
- b. Which concept emphasizes reproduction of the patient's comparable sign during passive joint mobilization? [CO1 PO1,5,8,9]
 - i. Cyriax
 - ii. Mulligan
 - iii. Maitland
 - iv. Kaltenborn
- c. Mulligan's Mobilization with Movement (MWM) is characterized by: [CO1 PO1,5,8,9]
 - i. Passive high-velocity thrust
 - ii. Combination of sustained accessory glide with active physiological movement
 - iii. Isolated static stretching
 - iv. Use of vibration therapy
- d. According to Kaltenborn's concave-convex rule, when a convex joint surface moves on a fixed concave surface, roll and glide occur: [CO1 PO1,5,8,9]
 - i. In the same direction
 - ii. With no glide at all
 - iii. As rotation only
 - iv. In opposite directions
- e. McKenzie's Mechanical Diagnosis and Treatment (MDT) primarily classifies patients into: [CO1 PO1,5,8,9]
 - i. Postural, Dysfunction and Derangement syndromes
 - ii. Acute, Subacute and Chronic stages
 - iii. Grade I to IV mobilizations
 - iv. Red flag and Yellow flag categories
- f. Positive Slump test finding would primarily guide: [CO1 PO1,5,8,9]
 - i. Muscle weakness is present
 - ii. Neural tissue mechanosensitivity is contributing to symptoms and neurodynamic treatment may be indicated
 - iii. Ligamentous laxity is present
 - iv. Joint effusion is present
- g. Muscle Energy Technique (MET) relies chiefly on which physiological principle? [CO1 PO1,5,8,9]
 - i. Reciprocal inhibition and post-isometric relaxation
 - ii. Golgi tendon organ inhibition of the agonist
 - iii. Stretch-shortening cycle
 - iv. Cross-bridge cycling
- h. Myofascial Release Technique is most appropriately integrated into a rehabilitation program targeting: [CO2 PO1,5,8,9]
 - i. Intra-articular derangement
 - ii. Fascial restrictions and connective tissue tightness
 - iii. Peripheral nerve entrapment
 - iv. Vascular insufficiency
- i. Cyriax's concept of "end-feel" assessment is central to: [CO1 PO1,5,8,9]
 - i. Postural analysis
 - ii. Neurodynamic testing
 - iii. Selective tissue tension testing
 - iv. Gait analysis
- j. While explaining osteopathic philosophy to an undergraduate student, the therapist would correctly emphasize that: [CO3 PO1,2,5,6]
 - i. Structure and function are interrelated and the body possesses an inherent capacity for self-healing
 - ii. Manipulation should be restricted only to the spine
 - iii. Only high-velocity thrust techniques are therapeutic
 - iv. Disease is purely psychological in origin

Q. 2. Short notes/ Short answer type questions (Attempt any Five)

(05 x 04 = 20)

- a. Grading system of Maitland's oscillatory mobilization [CO1 PO1,5,8,9]
- b. Concept and clinical relevance of Mulligan's SNAGs [CO1 PO1,5,8,9]
- c. Indications and contraindications of neurodynamic testing [CO2 PO1,5,8,9]
- d. Difference between subjective and objective assessment of pain [CO2 PO1,5,8,9]
- e. Explain the basic principles of Cyriax, as you would teach it to a BPT student [CO3 PO1,2,8,9]
- f. Role of clinical reasoning in manual therapy decision-making [CO2 PO1,5,8,9]
- g. Contraindications of spinal manipulation in osteopathic practice [CO2 PO1,5,8,9]

P.T.O.....

Q. 3. Structured questions (Attempt any Three)

(03 x 10 = 30)

- a. (i) Classification of Maitland's mobilization grades with their clinical use [CO1 PO1,5,8,9]
(ii) Its indications [CO2 PO1,5,8,9]
(iii) Its contraindications [CO3 PO1,2,5,6]
- b. (i) Principles of neurodynamic testing [CO1 PO1,5,8,9]
(ii) ULTT 1, 2 positions [CO2 PO1,5,8,9]
(iii) Explain Butler's concept of neural tension [CO3 PO1,2,5,6]
- c. (i) Explain principles of Muscle Energy Technique [CO3 PO1,2,5,6]
(ii) Integration of myofascial release technique in the rehabilitation of a patient with chronic myofascial pain [CO2 PO1,5,8,9]
(iii) Precautions during MET application [CO1 PO1,5,8,9]
- d. (i) Cyriax's concept of selective tissue tension [CO1 PO1,5,8,9]
(ii) Role of osteopathic principles in the rehabilitation of a patient with mechanical dysfunction [CO2 PO1,5,8,9]
(iii) Explain chiropractic-informed practice [CO3 PO1,2,5,6]

Q. 4. Long Answer/ Essay type questions (Attempt any Two)

(02 x 15 = 30)

- a. (i) Kaltenborn technique principles [CO1 PO1,5,8,9]
(ii) Indications and contraindications [CO2 PO1,5,8,9]
- b. (i) Principles and technique of application of Mulligan's Mobilization with Movement [CO1 PO1,5,8,9]
(ii) Indications and contraindications of MWM, explained [CO3 PO1,2,5,6]
- c. (i) Classification system of McKenzie's Mechanical Diagnosis and Treatment [CO1 PO1,5,8,9]
(ii) Use of McKenzie's assessment findings to plan rehabilitation of a patient with a derangement syndrome [CO2 PO1,5,8,9]